REMARKS

In the above-identified Office Action, the Examiner rejected Claims 1, 2, 6, 7, 11, 12, 16 and 17 under 35 U.S.C. §102(b) as being anticipated by Seidel. Claims 3 - 5, 8 - 10, 13 - 15 and 18 - 20 were indicated as allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims.

For the reasons stated more fully below, Applicants submit that the pending claims are allowable over the applied reference. Hence, reconsideration, allowance and passage to issue are respectfully requested.

As mentioned in the Response to the first Office Action as well as disclosed in the SPECIFICATION, IP storage, known as iSCSI, is a new emerging technology. ISCSI allows requests for data, transmission and reception of data over the Internet. ISCSI lets a corporate network transfer and store SCSI commands and data at any location with access to the WAN or, if transmitted over the Internet, to locations with access to the Internet.

As is well known, SCSI is a commonly used industry standard protocol for storage devices. Using the SCSI protocol, drive control commands and data are sent to the drives. Responses and status messages, as well as data read from the devices, are passed through SCSI controllers.

In a system supporting iSCSI, a user or software application issues a command to store or retrieve data on a SCSI storage device. The request is processed by the operating system and is converted to one or more SCSI commands that are then passed to an application program or to a card. The command and data are encapsulated by representing them as a serial string of bytes proceeded by iSCSI headers. The encapsulated data is then passed to a TCP/IP layer that breaks it into packets suitable for transfer over the network. If required, the encapsulated data can also be encrypted for transfer over an insecure network.

The packets are sent over the network or the Internet. At the receiving storage controller, the packets are recombined and, if necessary, decrypted into the original encapsulated SCSI commands and data. The storage controller then uses the iSCSI headers to send the SCSI control commands and data to the appropriate drive, which performs the functions that were requested by the original computer or application. If a request for data has been sent, the data is retrieved from the drive, encapsulated and returned to the requesting computer. The entire process is transparent to the user.

Anyway, due to the volume of data that may be being transacted, a higher data transfer rate may be convenient. Thus, there is a need for a method to boost the data transfer rate.

The present invention provides such a method. According to the teachings of the invention, when data that is divided into a number of packets is to be transmitted from one system to another, the packets are checked to see whether they exceed a threshold number. If so, the packets are transmitted in parallel. Before transmission, however, an indicium is added to each packet to facilitate proper reconstruction of the data by the receiving system.

The invention is set forth in claims of varying scopes of which Claim 1 is illustrative.

> 1. A method of transmitting data from a source system to a target system over a network, said data being divided into a number of packets before transmission, the method comprising the steps of:
>
> ***determining whether the number of packets exceeds a threshold number***; and
>
> ***transmitting the packets in parallel, if the number of packets exceeds the threshold number, each packet having an indicium for properly reconstructing the data by the target system.*** (Emphasis added.)

The Examiner rejected the independent claims under 35 U.S.C. §102(b) as being anticipated by Seidel. Applicants respectfully disagree.

Seidel purports to teach an apparatus and method for collating partitioned time disordered synchronous data streams. Specifically, Seidel teaches a system that is arranged for the transmission of a high-speed serial data stream between an originating end and a terminating end by distributing the high-speed serial data stream either bit-by-bit or sample-by-sample, sequentially, to a predetermined plurality of lower-speed channels. The originating end may be connected to the terminating end through an intermediary office (i.e., a central office). From the intermediary office to the terminating end, the lower speed channels may be routed over separate paths in a switched telephone network. Consequently, the data may not arrive simultaneously at the terminating end. In order to insure proper reconstruction of the data, the lower-speed channels are assigned a sequence number. The sequence number allows the data to be properly reconstructed at the terminating end. A terminating flag at the end of the message allows the transmission setup to be taken down.

However, Seidel does not teach, show or so much as suggests the step of ***determining whether the number of packets exceeds a threshold number***; and ***transmitting the packets in parallel, if the number of packets exceeds the threshold number, each packet having an indicium for properly reconstructing the data by the target system*** as claimed.

The Examiner stated that in col. 2, lines 50 – 53 Seidel teaches the determining step of the invention. Applicants disagree.

In col. 2, lines 50 – 65, it is stated that "[i]f a customer wants to transmit facsimile information contained on an 8-1/2 by11 in. sheet of paper, for example, about 1 Mb are required to convey this information without data processing. If the customer is to transmit this information using standard T-1 carrier channels, each channel can carry information at the rate of 64 kb/s. However, the eighth bit is occasionally used for supervision; therefore only 56 kb/s are effectively available to the customer for transmission. The customer will then need 18 channels (1 Mb.div.56 kb/s) to transmit 1 Mb of information in one second. He may wish to reduce the number of channels and increase the time for transmission; for

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example, 8 channels can carry 1 Mb of information in 2 seconds. This is an economic tradeoff which the customer can resolve, based on considerations of cost, bandwidth, and availability of channels."

Thus, in the passage reproduced above, Seidel teaches that the amount of data to be transferred within a particular time span determines the number of channels of a particular speed needed to transfer the data. Therefore, if the data that is being transmitted in each channel is considered a packet, then Seidel teaches that the amount of data to be transferred within a particular time span determines the number of packets into which the data is to be subdivided when transferring the data. However, the data itself is always transferred in parallel over the channels.

Therefore, Seidel does not teach the step of ***determining whether the number of packets exceeds a threshold number in order to transmit the packets in parallel*** as claimed.

Hence, Applicants submit that Claim 1, along with its dependent claims, is allowable over the reference. The other independent claims (i.e., Claims 6, 11 and 16), which all include the emboldened/italicized limitations in the above-reproduced Claim 1, as well as their dependent claims are also allowable over the reference. Consequently, Applicants once more respectfully request reconsideration, allowance and passage to issue of the claims in the application.

Respectfully Submitted

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